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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,197	02/11/2004	I-Ru Liu	BHT-3111-407	1631

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BRUCE H. TROXELL
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER

TRAN, TUAN A

ART UNIT.	PAPER NUMBER
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2618

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/775,197	Applicant(s) LIU, I-RU	
	Examiner Tuan A. Tran	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 37-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Species I (claims 1-36) in the reply filed on 03/08/2007 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-6, 13-14, 20, 22, 25, 29, 32 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Tuttle et al. (6,487,681).

Regarding claim 1, Tuttle discloses a batch testing system for wireless communication devices (See fig. 1) comprising: a signal generator 82 for generating a first testing signal (command message); a transceiving unit 66, deployed in a shielded anechoic chamber 72 and coupled to the signal generator 82, for transmitting the first testing signal; a plurality of wireless communication devices under test (DUTs) 51 in the shielded anechoic chamber 72 for receiving the first testing signal from the transceiving unit 66 and transmitting a plurality of second testing signals (reply messages) to the transceiving unit 66 in response to the received first testing signal; and a signal monitoring device {83,86}, coupled to the transceiving unit 66, for monitoring the second testing signals received by the transceiving unit 66 (See figs. 1-2, 4 and col. 3 line 16 to col. 4 line 49, col. 5 line 61 to col. 6 line 32).

Claim 20 is rejected for the same reasons as set forth in claim 1, as method.

Regarding claim 2, Tuttle discloses as cited in claim 1. Tuttle further discloses a control unit 84, coupled to the signal generator 82, the signal monitoring device {83,86} and the DUTs 51, for controlling the generation of the first testing signal and the monitoring and transmitting of the second testing signals (See fig. 2 and col. 4 lines 17-23).

Regarding claims 3-5, Tuttle discloses as cited in claim 2. Tuttle further discloses a multiplexer 92, coupled to the control unit 84, the signal monitoring unit device {83, 86} and the DUTs 51 for switching between a plurality of signal generating units and a plurality of signal monitoring units (See fig. 2 and col. 4 lines 11-15).

Regarding claim 6, Tuttle discloses as cited in claim 1. Tuttle further discloses a batch container 20 for loading the wireless communication devices (See fig. 1 and col. 3 lines 49-56).

Regarding claim 13, Tuttle discloses as cited in claim 1. Tuttle further discloses the transceiving unit 66 is an antenna or antenna array (See fig. 4 and col. 5 lines 61-63).

Regarding claim 14, Tuttle discloses as cited in claim 1. Tuttle further discloses the DUTs 51 are deployed in a quiet zone of the shielded anechoic chamber 72 (see col. 6 lines 12-32).

Claim 22 is rejected for the same reasons as set forth in claim 14, as method.

Regarding claim 25, Tuttle discloses as cited in claim 20. Tuttle further discloses the DUTs 51 receive the first testing signal in a predetermined channel (See-col. 4 lines 8-32).

Regarding claim 29, Tuttle discloses as cited in claim 20. Tuttle further discloses the second testing signals are transmitted in order in a predetermined channel by each of the DUTs 51 (See col. 4 lines 8-32).

Regarding claim 32, Tuttle discloses as cited in claim 20. Tuttle further discloses the step of selecting one or more of the DUTs 51 for transmitting the second testing signals in one or more predetermined non-overlapping channels (See col. 4 lines 8-32).

Regarding claim 34, Tuttle discloses as cited in claim 20. Tuttle further discloses the first testing signal is received in a predetermined channel by each of the DUTs 51 in order (See col. 4 lines 8-32).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7-12, 15-19, 21, 23-24, 26-28, 30-31, 33 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle et al. (6,487,681).

Regarding claim 7-8, Tuttle discloses as cited in claim 6. However, Tuttle does not explicitly mention that the batch container is a rectangular or circular container. Since the use of rectangular or circular batch container is merely a design choice;

therefore, it would have been obvious to one skill in the art at the time the invention was made to use such containers for the advantage of giving the designer a higher degree of freedom by using various types of container for loading testing devices.

Regarding claims 9-10, Tuttle discloses as cited in claim 6. Tuttle further discloses the batch container is set into the shielded anechoic chamber by a rolling-type loading mechanism (See fig. 1). However, Tuttle does not mention the use of window-type or drawer-type loading mechanism. Since window-type or drawer-type loading mechanism is widely known in the art; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use such loading mechanisms for the advantage of expanding the capability of the test system to various types of loading mechanism in order to accommodate the design's intention as well as the user's need.

Regarding claims 11-12, Tuttle discloses as cited in claim 1. However, Tuttle does not explicitly mention the chamber is pyramidal or cubical. Since Tuttle does suggest that the chamber can be in different shapes (i.e. hexahedral, spherical); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the chamber in pyramidal or cubical for the advantage of accommodating the design's intention as well as the user's need.

Claim 21 is rejected for the same reasons as set forth in claim 11, as method.

Regarding claims 15-19, Tuttle discloses as cited in claim 1. However, Tuttle does not explicitly mention that the signal generator is a vector signal generator or a Golden Sample of the DUTs, and the signal monitoring device is a Golden Sample of

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the DUTs or a spectrum analyzer or a vector analyzer and power meter. Since such devices are widely known in the art; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use such devices for the advantage of expanding the capability of the test system to various types of signal generator and monitoring devices as well as enhancing the test analysis by allowing the user to monitor different signal parameters.

Claims 23-24, 27-28 and 31 are rejected for the same reasons as set forth in claims 15-19, as method.

Regarding claims 26, 30, 33 and 35-36, Tuttle discloses as cited in claims 25, 29, 32 and 34. However, Tuttle does not mention that the step of analyzing minimum input power and PER, maximum output power and EVM, center frequency and power mask, downlink throughput, or uplink throughput of each of the selected DUTs in the predetermined channel. Since such testing parameters to determine operational performance of a wireless communication device are widely used in the art; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to set the Tuttle's test system up with such testing parameters for the advantage of enhancing device performance analysis in order to take appropriate actions.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wallace (7,035,594); Persson (2002/0160717); McKivergan (6,329,953).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Tran whose telephone number is (571) 272-7858. The examiner can normally be reached on Mon-Fri, 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Tuan Tran

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